

I CLAIM:

- 1. A langasite crystal substrate lamina for use in an electronic surface acoustic wave component having crystal cuts which provide a high coupling factor and low surface wave propagation velocity, said substrate lamina having an oriented substrate surface, wherein the surface is defined by Euler angles λ in the range of from 10° to 14°, μ in the range of from 130° to 150° and θ in the range of from above 160° to 175°.
- 2. The substrate lamina according to claim 1, wherein the substrate surface is defined by Euler angles $\lambda=10^{\circ}$, $\mu=140^{\circ}$ and $\theta=166^{\circ}$ and wherein therespective tolerance width for the angles μ and θ is $\pm 5^{\circ}$.
- 3. A langatate crystal substrate lamina for use in an electronic surface acoustic wave component having crystal cuts which provide a high coupling factor and low surface wave propagation velocity, said substrate lamina having an oriented substrate surface wherein the surface is defined by Euler angles selected from the group consisting of:

$$(\lambda = 0^{\circ} \pm 5^{\circ}; \mu = 80^{\circ} - 110^{\circ}; \theta = 0^{\circ} \pm 5^{\circ})$$

$$(\lambda = 0^{\circ}; \mu = 20^{\circ} \text{ to } 80^{\circ}, \theta = 32,5^{\circ} \pm 5^{\circ}) \text{ and}$$

$$(\lambda = 0^{\circ} - 20^{\circ}; \mu = 130^{\circ} - 150^{\circ}, \theta = 155^{\circ} - 180^{\circ})$$

$$(30^{\circ} \pm 5^{\circ}, 60^{\circ} \pm 5^{\circ}, 0^{\circ} \pm 5^{\circ})$$

$$(10^{\circ} \pm 5^{\circ}, 25^{\circ} \text{ to } 45^{\circ}, 26^{\circ} \pm 5^{\circ})$$

$$(20^{\circ} \pm 5^{\circ}, 30^{\circ} \text{ to } 70^{\circ}, 17^{\circ} \pm 5^{\circ}).$$

-11-